Safety Analysis Software Problem Reporting Form

Software Name:	POSTMAX v. 2.0
Person Reporting Problem:	Raymond F. Sartor
Problem #:	POSTMAX_problem_3

Definition of Potential Problem:

When POSTMAX V2.0 is used with option 3 (Multi-Year Analysis from Single-Year Output Files), the results for the first single-year file specified in the command line are removed from the POSTMAX Summary file. This removal creates an omission (gap) in the Summary file.

Evaluation of Potential Problem:

POSTMAX does not produce any erroneous values due to this problem. The single-year results are available from the cdo and csv files generated by POSTMAX.

Risk Assessment:

This problem is not significant since POSTMAX multi-year results are used in LANL consequence analyses and the single-year results are not.

Option 3 is a new feature of POSTMAX V2.0 and has not been used for LANL consequence analyses.

The single-year results are sometimes reviewed to examine result changes from year to year. In this type of comparison, it would be obvious that the year is missing.

Recommended Corrective Actions:

Short-Term – Avoid using POSTMAX V2.0 with option 3. Multi-year results are also available with Options 1 & 2. If option 3 is used, do not rely solely on the Summary file for POSTMAX results.

Long-Term – Modify POSTMAX source code. With options 1 & 2, outfile is the single-year output filename and cdofile(1) is the multi-year output filename. In this case, POSTMAX needs to delete any results for outfile and cdofile(1) from the existing Summary file before appending new results for outfile and cdofile(1) to the Summary file. With option 3, is the multi-year

output filename and cdofile(1) is the first single-year input filename. In this case, it is not appropriate to delete the cdofile(1) results from the existing Summary file. In subroutine copy_file, change line: if (index(line,outfile).eq.0.and.index(line,cdofile(1)).eq.0) then to: if (index(line,outfile).eq.0.and.(index(line,cdofile(1)).eq.0.or.calc_type.eq.3)) then			
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